

**REMARKS**

Claims 1-27 are now pending in this application. By this response to the non-final Office Action dated July 10, 2007, claims 1 and 22 are amended. Care has been taken to avoid the introduction of new matter. Favorable reconsideration of the application in light of the following comments is respectfully solicited.

**Claims 1-21**

Claims 1-4 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,136,573 ("Kikuchi"). Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi in view of U.S. Patent No. 5,684,799 ("Bigham"). Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi in view of Bigham and U.S. Patent App. Pub. No. 2002/0159348 ("Kim"). Claims 7-8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi in view of Bigham and U.S. Patent No. 4,432,009 ("Reitmeier"). Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi in view of Japan Patent App. Pub. No. H10-276400 ("Hideki"). Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi in view of Japan Patent App. Pub. No. 2001-043115 ("Koichi"). Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi in view of Bigham, Koichi, and Reitmeier. Claims 12 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi in view of Hideki and U.S. Patent App. Pub. No. 2002/0184457 ("Yuasa"). Claims 13 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi in view of Hideki, Yuasa, and U.S. Patent No. 6,016,507 ("Carroll"). Claim 15 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi in view of Hideki, Yuasa, and U.S. Patent App. Pub. No. 2003/0110513 ("Plourde"). Claims 17 and 19 are rejected under

35 U.S.C. § 103(a) as being unpatentable over Kikuchi in view of Koichi, Yuasa, and U.S. Patent No. 6,671,454 (“Kaneko”). Claims 18 and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi in view of Koichi, Yuasa, Carroll, and Kaneko. Claim 20 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi in view of Koichi, Yuasa, Plourde, and Kaneko. Applicants respectfully traverse.

To establish a *prima facie* case of anticipation under 35 U.S.C. § 102(e), a reference must teach each and every limitation recited by a claim. Kikuchi fails to teach a number of limitations recited in claim 1, and therefore does not anticipate claim 1.

Claim 1 recites “monitoring . . . a bit-rate of the broadcast in the compressed state.” The portion of Kikuchi cited by the Office Action, col. 9, ll. 47-48, discusses “a recording bit rate computing section.” Col. 2, ll. 62-64 provides a more detailed description of the recording bit rate computing section, stating that it “computes the optimal recording rate in accordance with the remaining capacity.” This performs a determination of a target bit-rate for an encoded recording going out to storage, and does not disclose “monitoring . . . a bit-rate of the broadcast,” as recited.

Claim 1 further recites “calculating, in real time, a required capacity of a storage medium.” The cited portion, col. 2, ll. 60-64, is directed to other activities: “detecting an entire [available] capacity and a remaining [available] capacity,” neither of which involves “calculating . . . a *required* capacity,” as recited in claim 1.

Looking beyond these specific limitations to their context as a whole, claim 1 recites “broadcast data transmitted in a state of being compressed” which is monitored for a “predetermined recording time” and a “bit-rate,” and “calculating . . . a required capacity.” Kikuchi, on the other hand, “detect[s] a reserved recording time” (col. 2, ll. 59-60), calculates

“an entire remaining capacity (col. 3, l. 3; *see also* col. 2, l. 60 – col. 3, l. 3), and based upon this information “set[s] a recording bit rate, on the basis of the entire remaining capacity . . . and the reserved recording time” (col. 3, ll. 4-7). Then, “in accordance with the recording bit rate . . . record[s] a target video signal” (col. 3, ll. 8-11). Thus, Kikuchi clearly works differently than the method recited in claim 1. More specifically, Kikuchi begins with a capacity of a storage medium, and using the recording time determines a target bit-rate. *See* col. 14, ll. 55-57 (“the . . . capacity is divided by the recording time so as to calculate the recording bit rate”); *see also* p. 1, ll. 13-21 of present application (discussing prior art methods in which “bit-rate [is] determined by the expression, recording capacity ÷ recording time”). Additionally, a “required capacity,” as recited by claim 1, needed to store particular data is readily distinguished from determining an amount of available “remaining capacity,” as disclosed in Kikuchi.

The Office Action asserts that col. 16, ll. 43-47, teaches the recited step of “determining whether or not said calculated required capacity of the storage medium can be contained within an empty area or a freely limited area of the storage medium.” However, this portion, including the broader disclosure of col. 16, ll. 43-49, suffers from a similar deficiency as above. Claim 1 “calculat[es] . . . a required capacity” and “determin[es] whether or not [it] can be contained within . . . the storage medium.” Kikuchi does not function as recited in claim 1 - it “estimate[s] . . . the [available] recording capacity” (col. 16, l. 47), and uses this to determine the recording bit rate (col. 16, ll. 48-49). For similar reasons, Kikuchi also does not teach the step of considering “if said required capacity of the storage medium cannot be contained” as a basis for deciding whether to “convert[] . . . the broadcast,” as the claimed comparison is not disclosed.

Additionally, Kikuchi does not disclose “decoding and then re-compressing the broadcast data in the compressed state,” as recited in claim 1. Instead, Kikuchi merely discloses compressing input data so as to accord with a target recording bit-rate.

For at least the reasons discussed above, Kikuchi does not anticipate claim 1 under 35 U.S.C. § 102(e). As claims 2-20 depend upon base claim 1, they are allowable for at least the same reasons presented for claim 1 above. Nothing in the cited references of Kikuchi, Bigham, Kim, Reitmeier, Hideki, Koichi, Yuasa, Carroll, Plourde, and Kaneko, considered individually or in combination, teach the claimed subject matter. Furthermore, assembling a total of ten references to achieve the claimed subject matter has the appearance of a retrofit based on hindsight, which is not appropriate.

#### **Claims 22-27**

Claims 22-24 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kikuchi. Claim 25 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi in view of Hideki. Claim 26 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi in view of Koichi. Claim 27 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi in view of U.S. Patent App. Pub. No. 2003/0099285 (“Graziano”). Applicants respectfully traverse.

Claim 22 recites a device with limitations similar to those discussed above from claim 1. Thus, for essentially the same reasons articulated above with respect to claim 1, Kikuchi does not anticipate claim 22 under 35 U.S.C. § 103(a). As claims 23-27 depend upon base claim 22, they are allowable for at least the same reasons. Nothing in the cited references of Kikuchi, Hideki,

Koichi, and Graziano, considered individually or in combination, teach the claimed subject matter.

In view of the above amendments and remarks, Applicants respectfully submit that the application is in condition for allowance, and respectfully request the Examiner's favorable reconsideration as to allowance. The Examiner is invited to contact the Applicants' representative listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP



Michael E. Fogarty

Registration No. 36,139

**Please recognize our Customer No. 53080  
as our correspondence address.**

600 13<sup>th</sup> Street, N.W.  
Washington, DC 20005-3096  
Phone: 202.756.8000 MEF:EMS  
Facsimile: 202.756.8087  
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